Gianluca Milano

List of Publications by Year
in descending order

32 papers	1,130 citations	471061 17 h-index	414034 32 g-index
34 all docs	34 docs citations	34 times ranked	901 citing authors

#	Article	IF	Citations
1	2022 roadmap on neuromorphic computing and engineering. Neuromorphic Computing and Engineering, 2022, 2, 022501.	2.8	217
2	In materia reservoir computing with a fully memristive architecture based on self-organizing nanowire networks. Nature Materials, 2022, 21, 195-202.	13.3	180
3	Self-limited single nanowire systems combining all-in-one memristive and neuromorphic functionalities. Nature Communications, 2018, 9, 5151.	5.8	115
4	Recent Developments and Perspectives for Memristive Devices Based on Metal Oxide Nanowires. Advanced Electronic Materials, 2019, 5, 1800909.	2.6	94
5	Brainâ€Inspired Structural Plasticity through Reweighting and Rewiring in Multiâ€Terminal Selfâ€Organizing Memristive Nanowire Networks. Advanced Intelligent Systems, 2020, 2, 2000096.	3.3	72
6	Multiple resistive switching in coreâ€"shell ZnO nanowires exhibiting tunable surface states. Journal of Materials Chemistry C, 2017, 5, 10517-10523.	2.7	40
7	Unravelling Resistive Switching Mechanism in ZnO NW Arrays: The Role of the Polycrystalline Base Layer. Journal of Physical Chemistry C, 2018, 122, 866-874.	1.5	34
8	Quantum Conductance in Memristive Devices: Fundamentals, Developments, and Applications. Advanced Materials, 2022, 34, e2201248.	11.1	31
9	TEM Nanostructural Investigation of Ag-Conductive Filaments in Polycrystalline ZnO-Based Resistive Switching Devices. ACS Applied Materials & Interfaces, 2020, 12, 29451-29460.	4.0	27
10	A multi-level memristor based on atomic layer deposition of iron oxide. Nanotechnology, 2018, 29, 495201.	1.3	26
11	Tuning ZnO Nanowire Dissolution by Electron Beam Modification of Surface Wetting Properties. Journal of Physical Chemistry C, 2018, 122, 8011-8021.	1.5	23
12	Water-Mediated Ionic Migration in Memristive Nanowires with a Tunable Resistive Switching Mechanism. ACS Applied Materials & Interfaces, 2020, 12, 48773-48780.	4.0	23
13	Ionic Modulation of Electrical Conductivity of ZnO Due to Ambient Moisture. Advanced Materials Interfaces, 2019, 6, 1900803.	1.9	22
14	Kinetics of defect formation in chemically vapor deposited (CVD) graphene during laser irradiation: The case of Raman investigation. Nano Research, 2015, 8, 3972-3981.	5.8	20
15	Modeling of Short-Term Synaptic Plasticity Effects in ZnO Nanowire-Based Memristors Using a Potentiation-Depression Rate Balance Equation. IEEE Nanotechnology Magazine, 2020, 19, 609-612.	1.1	20
16	Connectome of memristive nanowire networks through graph theory. Neural Networks, 2022, 150, 137-148.	3.3	19
17	Junction properties of single ZnO nanowires with asymmetrical Pt and Cu contacts. Nanotechnology, 2019, 30, 244001.	1.3	18
18	Recent Advances in Sequential Infiltration Synthesis (SIS) of Block Copolymers (BCPs). Nanomaterials, 2021, 11, 994.	1.9	18

#	Article	IF	Citations
19	Resistive switching in sub-micrometric ZnO polycrystalline films. Nanotechnology, 2019, 30, 065707.	1.3	17
20	Mapping Time-Dependent Conductivity of Metallic Nanowire Networks by Electrical Resistance Tomography toward Transparent Conductive Materials. ACS Applied Nano Materials, 2020, 3, 11987-11997.	2.4	17
21	Hydrothermally grown ZnO nanowire array as an oxygen vacancies reservoir for improved resistive switching. Nanotechnology, 2020, 31, 374001.	1.3	14
22	Compact Modeling of the I-V Characteristics of ZnO Nanowires Including Nonlinear Series Resistance Effects. IEEE Nanotechnology Magazine, 2020, 19, 297-300.	1.1	13
23	Structureâ€Dependent Influence of Moisture on Resistive Switching Behavior of ZnO Thin Films. Advanced Materials Interfaces, 2021, 8, 2100915.	1.9	13
24	Grid-graph modeling of emergent neuromorphic dynamics and heterosynaptic plasticity in memristive nanonetworks. Neuromorphic Computing and Engineering, 2022, 2, 014007.	2.8	10
25	Recommended implementation of electrical resistance tomography for conductivity mapping of metallic nanowire networks using voltage excitation. Scientific Reports, 2021, 11, 13167.	1.6	9
26	Metalâ€“insulator transition in single crystalline ZnO nanowires. Nanotechnology, 2021, 32, 185202.	1.3	8
27	Memristive devices based on single ZnO nanowiresâ€"from material synthesis to neuromorphic functionalities. Semiconductor Science and Technology, 2022, 37, 034002.	1.0	7
28	Memristive Devices for Quantum Metrology. Advanced Quantum Technologies, 2020, 3, 2000009.	1.8	6
29	Electrochemical metallization ReRAMs (ECM) - Experiments and modelling: general discussion. Faraday Discussions, 2019, 213, 115-150.	1.6	5
30	Brainâ€Inspired Structural Plasticity through Reweighting and Rewiring in Multiâ€Terminal Selfâ€Organizing Memristive Nanowire Networks. Advanced Intelligent Systems, 2020, 2, 2080071.	3.3	4
31	In Materia Should Be Used Instead of In Materio. Frontiers in Nanotechnology, 2022, 4, .	2.4	4
32	Temperature study of CVD graphene on Cu thin films: competition between C catalysis and Cu dewetting. Materials Research Society Symposia Proceedings, 2014, 1658, 94.	0.1	0